



ASSIGNMENT NO. 1

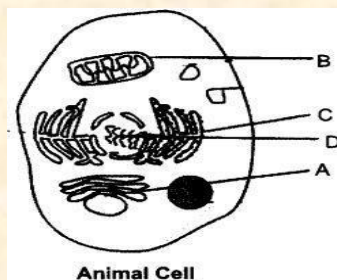
SUBJECT: BIOLOGY

CLASS-IX

APRIL'2025

Ch- 5: The Fundamental Unit of life

1. Give the function of nuclear membrane.
2. When we put raisins in water, why do they swell?
3. Label the figure and answer the questions:
 - (i) A – It is the packaging organelle
 - (ii) B – Provides energy
 - (iii) C – helps in the transport of material
 - (iv) D – Carries the information.



4. Two sailors got marooned on the island, both of them were very thirsty and one of the sailors tried to drink sea water. The other sailor immediately stopped him from drinking the salty water of sea and suggested to wait for some help, stay calm and patient.
 - (a) What would happen if the sailor drinks salty water?
 - (b) What is osmosis?
5. Carry out the following osmosis experiment:

Take four peeled potato halves and scoop each one out to make potato cups, one of these potato cups should be made from a boiled potato. Put each potato cup in a trough containing water. Now,

 - (a) Keep cup A empty
 - (b) Put one teaspoon sugar in cup B
 - (c) Put one teaspoon salt in cup C
 - (d) Put one teaspoon sugar in the boiled potato cup D

Keep these for two hours. Then observe the four potato cups and answer the following:

 - (i) Explain why water gathers in the hollowed portion of B and C.
 - (ii) Why is potato A necessary for this experiment?
 - (iii) Explain why water does not gather in the hollowed-out portions of A and D.